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USWAG

Utility Industry Perspective on the Potential for Improving the Regulatory Climate for the Management of Coal Combustion Products

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INTRODUCTION

I am Jim Roewer, Executive Director of the Utility Solid Waste Activities Group - "USWAG". For those of you who are not familiar with USWAG, the organization was formed in 1978 to address solid and hazardous waste regulatory issues arising under RCRA. Its membership includes approximately 80 energy industry operating companies and associations, including the Edison Electric Institute, the National Rural Electric Cooperative Association, the American Public Power Association, and the American Gas Association. Together, USWAG members represent more than 85% of the total electric generating capacity of the U.S., and service more than 95% of the nation's consumers of electricity and over 93% of the nation's consumers of natural gas. As such, USWAG became the principal spokesperson for the utility industry throughout the Bevill study and Regulatory Determination process and was instrumental in providing data and otherwise collaborating with EPA in its longstanding effort to assess the risks from coal combustion product management. And as EPA proceeds with follow-up investigations and implementation of its non-hazardous regulatory determination we continue our productive and cooperative relationship that has now extended over 21 years.

After nine sessions on coal combustion products, I am sure you have a strong sense of where EPA is headed and what state and federal stakeholders think about EPA's plans. I would like to step back for a moment and make sure we all appreciate the background of this effort. And while I'll touch on our views of EPA's regulatory efforts, I'd like to focus on what should be our first priority -- the improvement of opportunities for the recycling or beneficial use of CCPs and therefore the reduction of volumes of these materials requiring management as waste.

BACKGROUND

We all know by now that EPA published the Phase II Bevill Regulatory Determination in the *Federal Register* on May 22, 2000 (65 Fed. Reg. 32214), officially deciding that

fossil fuel combustion wastes “do not warrant regulation under Subtitle C of RCRA” and retaining the Bevill exemption under RCRA § 3001(b)(3)(C). Former Administrator Carol Browner signed that determination, which incorporated the fundamental premise that these wastes do not warrant Subtitle C regulation, which had been tested and evaluated for almost 20 years and was supported by a voluminous record. Indeed, until the final months of the debate, no one had seriously suggested that these wastes require hazardous waste regulation. EPA is to be praised for its thorough evaluation of the scientific evidence which led to the proper outcome.

It is important that we appreciate the deeper background of the Bevill Study and not let the contortions of the final few months of controversy supplant the record of almost 20 years of productive and cooperative research. First, and foremost, the Bevill Study was a cooperative and open process. As envisioned by the Bevill Amendment, USWAG -- as the representative of the utility industry -- worked cooperatively with EPA staff and the Electric Power Research Institute to design representative, site-specific studies and provide EPA with the data necessary to evaluate CCP management practices. All our data collection activities were discussed with EPA in advance, and the information provided to EPA was available to the public.

In the Regulatory Determination EPA found that

- these wastes rarely exhibit the characteristics of hazardous waste;
- the trend among electric utilities is to install more environmental controls at waste management facilities, including liners, covers, and groundwater monitoring;
- there are few documented cases of proven damage to the environment caused by fossil fuel combustion wastes, and these few cases all involve older, unlined management units, most of which no longer are receiving combustion wastes, and at which there were no adverse human health effects;
- electric utility companies have achieved an outstanding record of environmental regulatory compliance, with no major enforcement cases involving solid or hazardous waste at a utility facility in the five year period between 1992 and 1997; and
- the states have developed a comprehensive body of regulations applicable to the waste management units in which utilities store and dispose of combustion wastes.

Nonetheless, EPA determined that follow-up action under Subtitle D was necessary in response, most significantly, to 11 damage cases that the Agency had identified and to various "gaps" in state regulatory programs.

Performance-Based, Gap Filling Guidance for State Programs

In other words, EPA is concerned that various "gaps" in some state programs demonstrate that the states need assistance through Subtitle D standards to address the potential for environmental damage represented by a limited number of cases that EPA identified where management practices -- in most cases pre-RCRA management practices -- may have resulted in environmental harm. Said another way, EPA has determined that most states are adequately regulating any risks presented by CCP management, which are neither widespread nor on a scale that would warrant Subtitle C regulation.

EPA's response then should respect state regulatory authorities and address the gaps rather than prescribing a sweeping, nationally uniform program that would supplant existing state programs. It should also be performance-oriented to allow for site-specific determination of appropriate regulatory measures.

We understand that EPA is indeed pursuing a performance-oriented strategy. We trust that the implementation will provide the states a framework within which they can enhance rather than supplant programs that have served them well.

We also note that EPA is completing work on the final version of the *Voluntary Guide for Industrial Waste Management*, which is designed to assist states in improving their industrial waste management programs. The Industrial D Guide was developed through a collaborative Federal Advisory Committee Act process under the direction of ASTSWMO and EPA. USWAG participated in the process, and OSW developed the Guide with the intention that it would apply to fossil fuel combustion waste management units. Thus, the states will have available in July 2002 -- almost 2 years before the scheduled completion date for the fossil fuel combustion standards -- a tool to help them address any of the gaps that EPA may have identified particular to CCP management.

Mine Placement

The majority of this afternoon's discussions have focused on mine placement of CCPs. USWAG's views are largely in line with those expressed by Greg Conrad of the Interstate Mining Compact Commission**,** and I will not dwell on this topic in isolation. However, I feel obliged to emphasize that EPA has not identified a single damage case attributable to placement of CCPs in an abandoned coal mine. And, as EPA acknowledged in the Regulatory Determination, the Surface Mining Reclamation and Control Act is "expressly designed to address environmental risks associated with coal mines." 65 Fed. Reg. at 32217.

Increasing Beneficial Use By Removing Regulatory Barriers

I'd like to move beyond the Subtitle D regulatory issues to focus on the most fertile area for environmental achievement -- increased beneficial use of CCPs. And, of course, this issue will be influenced greatly by EPA's Subtitle D standards. One of USWAG's goals is for regulators to address beneficial use as a priority for affirmative efforts -- as RCRA envisions -- rather than as a consequence of regulatory actions focused on wastes. We are encouraged that Assistant Administrator Horinko has announced that she intends to focus on improving recycling and minimization of industrial wastes with a

new focus on the power of Subtitle D and look forward to cooperating towards this mutual goal.

More than 80% of United States energy production is derived from fossil fuel combustion, and annual combustion of roughly 900 million tons of coal accounts for more than half the electricity produced. As products of the combustion, electric utilities currently produce roughly 100 million tons per year of CCPs. The need for advancement of reuse has driven USWAG's regulatory efforts, and our member companies recycle considerable quantities of CCPs. However, the nationwide beneficial reuse rate stands at only 31%. Although we are proud that this percentage is a dramatic improvement from 1980s levels, we are not resting on our laurels. We are determined to achieve major increases in this percentage over the coming years.

EPA recognized that a Subtitle C determination would have been disastrous for marketing efforts. What has proven true is that the debate itself and the follow-on regulatory focus has been enough to cloud the markets and take away the momentum towards increased reuse. The materials that are being held up as the subject of waste regulation on the one hand are the same materials that can be put to beneficial use.

Congress was concerned with the limitations on CCP reuse and directed the Department of Energy (DOE) in the Energy Policy Act of 1992 to study the "institutional, legal, and regulatory barriers" to increased utilization of combustion byproducts and to report its findings and recommendations. DOE completed its ash barriers study in 1993 and submitted its report to Congress in 1994. DOE, *Report to Congress, Barriers to the Increased Utilization of Coal Combustion/ Desulfurization By-Products by Governmental and Commercial Sectors* (July 1994) ("Ash Barriers Report"). While the Report identified numerous institutional barriers to ash utilization, it identified the RCRA "solid waste" designation associated with ash as the "most important" regulatory barrier.

DOE noted that in the absence of special state exemptions from the definition of solid waste, the "waste" designation can trigger waste disposal permitting procedures that discourage the use of CCPs because of cost and time required to complete the approval process. This designation is also said to create "attitudinal barriers" precluding use of CCPs. DOE further identified the inconsistency in federal and state regulations for use of such CCPs as a barrier to increased usage. The Commonwealth of Pennsylvania provides an example of a proactive state that has acted to remove a significant barrier by adopting an exemption from its disposal permit requirements for beneficial use of coal ash. PA Code § 287.601(b). Other states have taken similar actions, but EPA has remained silent on this important issue.

In addition, DOE determined that the "chief legal barrier" to increased CCP use is the "potential for liability associated with use of a material designated as a waste material." Ash Barriers Report at iv. Environmental liability, therefore, is a "strong deterrent" for use of a CCP when the material is designated and regulated as a solid waste. *Id*. at 18. For example, while regulations in the area of waste stabilization vary among states, the Report recognized the viable concern of CCP producers that they may be exposed to a large liability risk if the CCPs are used for waste remediation. The report was updated

in 1999, and DOE concluded that despite significant efforts by government agencies and industry, most of the barriers identified in the 1993 report persist.

Thus we were particularly gratified by EPA's findings in the Report to Congress and Regulatory Determination regarding the environmental soundness of most forms of beneficial use of fossil fuel combustion products. Yet we are disappointed that despite the favorable findings, we still have seen no steps to translate the positive environmental findings into regulatory policy. With the positive record achieved by beneficially used utility combustion products, EPA should take the lead in promoting increased utilization of these materials by urging Federal and State regulatory agencies to view these materials as products (subject to whatever regulations might apply to competing products) and not as wastes when they are beneficially used in a manner recognized to be environmentally sound. EPA should set the example by declaring that agency rules and policies applicable to waste materials will not apply to beneficial use of CCPs.

Indeed, increased utilization of CCPs should be carefully addressed as an integral part of EPA's solid waste and air emission control strategy. Reuse of CCPs has significant potential for direct reductions of air emissions by reducing reliance on cement kilns to produce cementitious materials used in concrete. According to *Environmental Building News* (June 1999), an increase in the reuse rate of coal fly ash from 15 to 50 percent of the cement currently used in concrete could eliminate as much as 600 million metric tons of CO_2 emissions annually emitted by the production of cement. Furthermore, the American Coal Ash Association estimates that the energy savings from the reduction of reliance on cement kilns translates to the avoidance of 10 to 14 million tons of CO_2 emissions annually.

USWAG has assessed the CCP generation and management implications of one "multi-pollutant" control scenario to illustrate the need for a significant expansion of reuse. The installation of scrubbers on an additional 135,000 to 201,000 MW would increase the volume of FGD materials by 35 to 52 million tons – potentially doubling current production. Land disposal alone cannot address this tremendous increase, and reuse must be expanded both through technological developments and expanded marketing of existing CCP uses.

In conclusion, out of all of the issues discussed today, increased beneficial use of CCPs presents the biggest potential for environmental improvement. We hope that EPA will assist the industry to maximize beneficial use of CCPs and thereby, in turn, minimize disposal in landfills and surface impoundments. USWAG will step up to the plate with the Agency and together we can achieve significant increases in beneficial use and go a long way to dispel any potential concerns with disposal.